

**CLOSEABLE RADIO COMMUNICATIONS DEVICE PROVIDING
AN ACOUSTIC CHAMBER**

FIELD OF THE INVENTION

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This invention relates to a closeable communications device with a two-part housing movable from a closed to an opened position. When in the closed position, the device provides an acoustic chamber for enhancing an audio signal's low frequency acoustic properties, the signal being emitted from a speaker typically mounted in the device. The invention is particularly useful for communications devices that have a two-part housing movable about a pivotal axis.

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BACKGROUND OF THE INVENTION

Communication devices, such as radio or cellular (mobile) telephones, that are easy to transport and support many features and functions are becoming commonplace. One communication device that is easy to transport is a closeable (or foldable) cellular telephone having a two part housing movable from an opened position to a closed position and vice versa. In the opened position, a conventional cellular telephone user interface includes a communications speaker, a microphone, a display and a keypad all of which are operable and accessible to a user. Also, in the opened position, the cellular telephone has a length that is sufficient to allow the ear and mouth of the user to align respectively with the speaker and microphone. In contrast, in the closed position some parts or all of the user interface may not be accessible to a user and the cellular telephone is shorter in length. It is therefore

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ABSTRACT OF THE DISCLOSURE

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The invention provides for a closeable radio communications device (1) comprising a housing (21) having at two portions (22,23) pivotally mounted to each other to allow relative movement of the portions between a closed position and an opened position. There is a spacing projection (30) on one of the two portions (22,23), the spacing projection (30) being configured such that when the housing (21) is in the closed position an acoustic chamber (31) is formed by an inner surface (32) of the projection and facing surfaces (27,28) of the respective portions (22,23). A speaker (5d) mounted inside the housing (21) is in operative communication with the acoustic chamber (31).

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FIG. 2 accompanies this abstract.